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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/802,718	03/08/2001	Glenna C. Burmer	017473-003610US	7885

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EXAMINER
GOLDBERG, JEANINE ANNE

ART UNIT	PAPER NUMBER
1634	6

DATE MAILED: 09/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/802,718	Applicant(s) BURMER ET AL.	
	Examiner Jeanine A Goldberg	Art Unit 1634	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 July 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-6, drawn to a method for detecting whether a tissues is undergoing senescence by detection overexpression or underexpression of a senescence-associated molecule in Table 1, classified in class 435, subclass 6. (Subject to further restriction, see sequence restriction below).

II. Claims 7-10, drawn to a method of identifying a modulator of senescence by culturing cells in the presence of a modulator, contacting nucleic acid with a probe and determining the amount, and detecting the presence or absence of an increased proliferative potential, classified in class 514, subclass 2, 514/44, 424/9.2, for example. (Subject to further restriction, see sequence restriction below).

III. Claims 11-12, 17, drawn to methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is a nucleic acid, classified in class 514, subclass 44. (Subject to further restriction, see sequence restriction below).

IV. Claims 11, 13-14, 16-17 drawn to methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is a

protein or antibody, classified in class 514, subclass 2. (Subject to further restriction, see sequence restriction below).

V. Claims 14-15, 17 drawn to drawn to methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is an antisense polynucleotide, classified in class 514, subclass 44, 536/24.5. (Subject to further restriction, see sequence restriction below).

VI. Claims 18, drawn to a kit comprising a probe and a label of Table 1, classified in class 536, subclass 23.1, 26.6. (Subject to further restriction, see sequence restriction below).

VII. Claims 19-20, drawn to a cosmetic composition comprising a compound that modulates the senescence of a cell, classified in class 536, subclass 23.1, 24.5, 530/350, 424/130.1, for example.

2. The inventions are distinct, each from the other because of the following reasons:

A) The inventions of Group I, II, III, IV and V are patentably distinct methods because they each have different objectives, different uses, different reagents and different method steps. The method of Group I method for detecting whether a tissues is undergoing senescence by detection overexpression or underexpression of a senescence-associated molecule in Table 1. Group II is drawn to a method of identifying a modulator of senescence by culturing cells in the presence of a modulator, contacting nucleic acid with a probe and determining the amount, and detecting the presence or absence of an increased proliferative potential. Group III is drawn to

methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is a nucleic acid. Group IV is drawn to methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is a protein or antibody. Group V is drawn to drawn to methods of inhibiting cell senescence by introducing a senescence-associated molecule wherein the molecule is an antisense polynucleotide. Therefore, the objectives of Group I-V differ. The reagents which Groups I-V use differ and have different method steps. Therefore the methods are distinct over one another.

B) Inventions VI and (I, II, III, V) are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the kit comprising a probe of Table 1 and a label, may be used in numerous methods as exemplified by the several methods which use the nucleic acids of the instant application. For example, the nucleic acids may be used for detecting expression levels, identifying modulators and inhibiting senescence. The nucleic acids may also be used in amplification assays, purification, aptamer, hybridization methods.

C) Group VI and IV are patentable distinct inventions because the kit comprising a probe of Group VI is not relied upon in the method of Group IV. Instead Group IV uses protein and antibodies. Therefore, the inventions are novel and unobvious over one another.

D) Group VII and (I-V) are patentable distinct inventions because the cosmetic composition comprising a compound which modulates senescence of a cell of Group VII not relied upon in the method of Group (I-V). Instead Group I-V uses nucleic acids and protein and antibodies. Therefore, the inventions are novel and unobvious over one another.

E) The products of Group VI and VII are patentable distinct inventions. The product of Group VI comprises a labeled probe according to Table 1. Whereas Group VII is directed to a cosmetic composition comprising a compound that modulates the senescence of a cell. Group VII is not limited to any specific sequences or compounds.

Restriction Requirement Applicable to All Groups:

3. The claims are drawn to senescence-associated molecules of Table 1. Table 1 contains 100 genes. Each sequence is patentably distinct because they are unrelated sequences, i.e. these sequences are unrelated because the protein encoded by these sequences differ in structure and in function and in biological activity. A restriction is applied to each Group. For an elected Group drawn to amino acid sequences, the Applicants must further elect a single amino acid sequence. For an elected Group drawn to nucleotide sequences, the Applicants are permitted to elect a single nucleic acid sequences (See MPEP 803.04).

The claims contains 100 individual, independent and distinct nucleotide sequences in alternative form. Accordingly, these claims are subject to restriction under 35 U.S.C. 121 as outlined in 1192 O.G. 68 (November 19, 1996).

Nucleotide sequences encoding different proteins are structurally distinct chemical compounds and are unrelated to one another. These sequences are thus deemed to normally constitute independent and distinct inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide sequences are presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq.

Should applicant traverse on the ground that the nucleic acids or proteins are not patentably distinct, applicant should submit evident or identify such evidence now of record showing the species to be obvious variant or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other inventions.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by the different classifications and their divergent subject matter, restriction for examination purposes as indicated is proper.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Jeanine Goldberg whose telephone number is

(703) 306-5817. The examiner can normally be reached Monday-Friday from 8:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on (703) 308-1152. The fax number for this Group is (703) 305- 3014.

Any inquiry of formal matters can be directed to the patent analyst, Pauline Farrier, whose telephone number is (703) 305-3550.

Any inquiry of a general nature should be directed to the Group receptionist whose telephone number is (703) 308-0196.

J. Goldberg

Jeanine Goldberg
September 6, 2002

W. Gary Jones
Supervisory Patent Examiner
Technology Center 1600